

1972

B72-10032

NASA TECH BRIEF

Manned Spacecraft Center



NASA Tech Briefs announce new technology derived from the U.S. space program. They are issued to encourage commercial application. Tech Briefs are available on a subscription basis from the National Technical Information Service, Springfield, Virginia 22151. Requests for individual copies or questions relating to the Tech Brief program may be directed to the Technology Utilization Office, NASA, Code KT, Washington, D.C. 20546.

An Improved Aesthesiometer

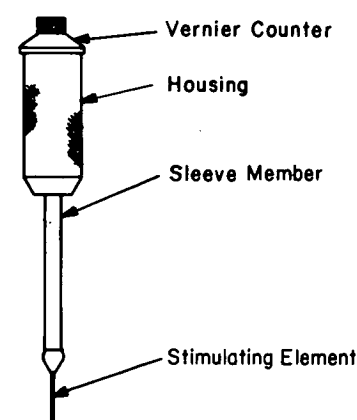


Figure 1.

An improved biomedical tool measures cutaneous sensory preception with improved reliability and consistency. A vernier-adjustable, monofilament stimulating element is pressed against the skin. The force necessary to produce a slight element flexure is inversely proportional to the element length and is indicated by the calibrated vernier dial.

Previously, examiners noted the patient's responses to touches with a series of pins, but were not able to take actual measurements of the pressure applied. The improved aesthesiometer allows consistent application of a regular and determinable pressure to the skin of the individual. It is of relatively simple construction, inexpensive to manufacture and easy to operate.

The instrument (illustrated in Figure 1) is basically a thin stimulating element attached to a calibrated vernier dial. Adjustment of the dial extends or retracts

the element within a tubular sleeve. In use, the element is brought into contact with the subject and pressed against the skin until a slight element flexure is noted. If the patient does not respond, the element is shortened to make it stiffer and the process repeated until the pressure is felt. This contact pressure is determined from the dial setting by reference to a calibration curve (illustrated in Figure 2).

Note:

Requests for further information may be directed to:

Technology Utilization Officer
Manned Spacecraft Center, Code JM7
Houston, Texas 77058
Reference: TSP72-10032

(continued overleaf)

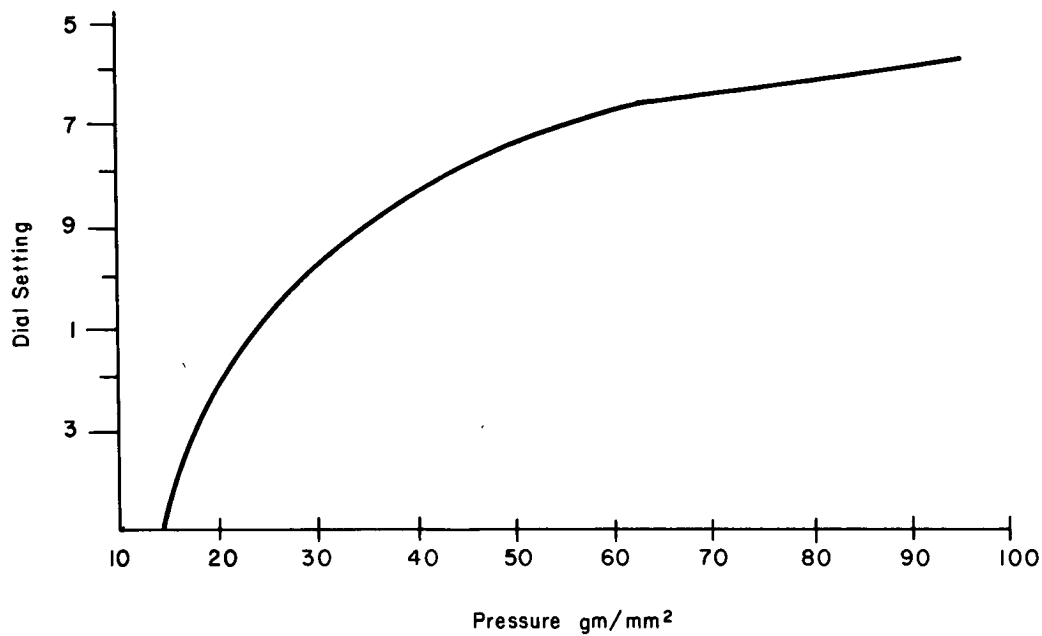


Figure 2.

Patent status:

This invention is owned by NASA, and a patent application has been filed. Royalty-free, nonexclusive licenses for its commercial use will be granted by NASA. Inquiries concerning license rights should be made to:

Patent Counsel
Code AM
NASA Manned Spacecraft Center
Houston, Texas 77058

Source: D. Wright and R. Richardson
General Electric Company
under contract to
Manned Spacecraft Center
(MSC-13609)